

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,287	03/12/2004	Peter T. Barrett	MS1-1796US	1313
23801 7590 6VI8/2008 LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER	
			MATTIS, JASON E	
			ART UNIT	PAPER NUMBER
			2616	
			MAIL DATE	DELIVERY MODE
			03/18/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/800 287 BARRETT ET AL. Office Action Summary Examiner Art Unit JASON E. MATTIS 2616 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 20 December 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-4.6.7.9-15.17-23.25-32.35-38 and 40 is/are rejected. 7) Claim(s) 5.8.16.24.33.34 and 39 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (PTO-413) Paper No(s)/Mail Date
Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1 paper</u> .	5) Notice of Informal Patent Application 6) Other:
J.S. Patent and Trademark Office	

Application/Control Number: 10/800,287 Page 2

Art Unit: 2616

DETAILED ACTION

 This Office Action is in response to the Amendment filed 12/20/07. Due to the amendment, the previous claim objections have been withdrawn. Claims 1-40 are currently pending in the application.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-4, 6, 7, 9, 20-23, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babiarz et al. (U.S. Publication US 2005/0047340
 A1) in view of DeMoney (U.S. Pat. 6438630 B1).

With respect to claim 1, Babiarz et al. discloses a processor-accessible media comprising processor-executable instructions (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions). Babiarz et al. also discloses transmitting a send request having a priority (See page 4 paragraphs 47-48 of Babiarz et al. for reference to call admission requests including priority levels). Babiarz et al. further discloses receiving a threshold

Art Unit: 2616

priority, comparing the priority of the send request to the threshold priority, and determining if the send request is selected responsive to the comparing (See page 4 paragraph 48 of Babiarz et al. for reference to receiving a certain priority, which is a threshold priority, where calls above the certain priority may be admitted and while other calls are not, meaning the priority of a call admission request is compared to the certain priority and a determination of whether the call admission request is selected is made in response to the comparison). Babiarz et al. also discloses scheduling and sending if the send request is selected (See page 4 paragraph 48 of Babiarz et al. for reference to scheduling and admitting calls selected in accordance with the certain priority level). Babiarz et al. does not specifically disclose the threshold priority being calculated based on whether media data requested comprises deadline media data versus other types of media data. Although Babiarz et al. does disclose utilizing its method in any real-time data network (See page 2) paragraph 27 of Babiarz et al. for reference to real-time packet flows such as voice, video, data and combinations thereof). Babiarz et al. does not specifically disclose scheduling including stipulating a particular media portion to be sent.

With respect to claim 2, Babiarz et al. does not specifically disclose transmitting send requests to senders having the media data stipulated in the request.

With respect to claim 4, Babiarz et al. does not specifically disclose that the priority is dependent on whether requested media data is deadline media

Art Unit: 2616

data versus early media data, with deadline data having a relatively higher priority.

With respect to claim 20, Babiarz et al. discloses an arrangement for prioritized distributed sending of media data (See the abstract of Babiarz et al. for reference to admission control for sending media data). Babiarz et al. also discloses a scheduler means sending requests having priorities and determining if the send request have been selected using the send priorities and a threshold priority (See page 4 paragraphs 47-48 of Babiarz et al. for reference to sending call admission requests including priority levels and for reference to receiving a certain priority, which is a threshold priority, where calls above the certain priority may be admitted and while other calls are not, meaning the priority of a call admission request is compared to the certain priority and a determination of whether the call admission request is selected is made in response to the comparison). Babiarz et al. further discloses a sender means sending media data in response to requests in accordance with the send priorities and ascertaining the threshold priority based on the send priorities and a send bandwidth (See page 4 paragraphs 47-48 of Babiarz et al. for reference to determining the certain priority based on call admission request priorities and the amount of available bandwidth and for reference to admitting calls in accordance with request priorities). Babiarz et al. does not specifically disclose the threshold priority being calculated based on whether media data requested comprises deadline media data versus other types of media data.

Art Unit: 2616

With respect to claim 21, Babiarz et al. discloses the send requests having a designated destination client and send priorities (See page 2 paragraphs 27-28 and page 4 paragraph 48 of Babiarz et al. for reference to the requests stipulating a destination and priority). Babiarz et al. does not the send requests having the media data stipulated in the request.

With respect to claims 1, 2, 4, 20, and 21, DeMoney, in the field of communications, discloses basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data (See column 4 lines 5-38 and column 6 lines 43-61 for reference to prioritizing media stream requests with requests that carry a specific deadline being giving priority over requests that do not carry a specific deadline). DeMoney also discloses stipulating specific media portions to be sent (See column 6 lines 43-61 of DeMoney for reference to scheduling requests for specific stored multimedia files to be sent based on priorities). Basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data and scheduling specific media portions to be sent based on the priorities has the advantage of allowing deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of DeMoney, to combine basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data and scheduling specific media

Art Unit: 2616

portions to be sent based on the priorities, as suggested by DeMoney, with the system and method of Babiarz et al., with the motivation being to allow deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

With respect to claim 3, Babiarz et al. for reference to the threshold priority representing a send request cutoff that indicates a least important priority for send requests selected for sending (See page 4 paragraph 48 of Babiarz et al. for reference to the certain priority level being a priority level cutoff for admitting new call requests).

With respect to claim 6, Babiarz et al. discloses selecting the send request if it is ascertained that its priority is more important than the threshold priority (See page 4 paragraph 48 for reference to admitting requests with a priority above the certain priority level).

With respect to claim 7, Babiarz et al. discloses not selecting the request if it is ascertained that its priority is not more important than the threshold priority (See page 4 paragraph 48 for reference to not admitting requests with a priority less than the certain priority level).

With respect to claim 9, Babiarz et al. discloses software implementing a scheduler (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions).

With respect to claim 22, Babiarz et al. discloses transmitting the request to a sender that sends media data stipulated in the send request to a destination

Art Unit: 2616

client designated in the send request (See page 2 paragraphs 27-28 and Figure 1 of Babiarz et al. for reference to requesting a packet flow such as a video flow to be sent from a sender to a destination).

With respect to claim 23, Babiarz et al. discloses comparing send priorities to the threshold priority (See page 4 paragraph 48 for reference to comparing request priorities to the certain priority).

With respect to claim 25, Babiarz et al. discloses a plurality of schedulers and senders (See page 4 paragraph 49 and Figure 3 of Babiarz et al. for reference to a plurality of devices acting as both senders and schedulers as a part of network 300).

With respect to claim 27, Babiarz et al. discloses that the arrangement comprises one or more processor-accessible media (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions).

 Claims 10, 11, 14, 15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babiarz et al. in view of DeMoney and in further view of Bhatia et al. (U.S. Pat. 6112101).

With respect to claim 10, Babiarz et al. discloses a processor-accessible media comprising processor-executable instructions (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions). Babiarz et al. also discloses receiving a plurality of send requests having respective

Art Unit: 2616

priorities (See page 4 paragraphs 47-48 of Babiarz et al. for reference to call admission requests including priority levels). Babiarz et al. further discloses ascertaining a threshold priority based on the priorities of the send requests responsive to a send bandwidth (See page 4 paragraph 48 of Babiarz et al. for reference to determining a certain priority, which is a threshold priority, based on priorities and available bandwidth, where calls above the certain priority may be admitted and while other calls are not). Babiarz et al. does not specifically disclose the threshold priority being calculated based on whether media data requested comprises deadline media data versus other types of media data. Babiarz et al. also does not specifically disclose broadcasting the threshold priority.

With respect to claim 11, Babiarz et al. discloses the send requests having a designated destination client and send priorities (See page 2 paragraphs 27-28 and page 4 paragraph 48 of Babiarz et al. for reference to the requests stipulating a destination and priority). Babiarz et al. does not the send requests having the media data stipulated in the request.

With respect to claims 10 and 11, DeMoney, in the field of communications, discloses basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data (See column 4 lines 5-38 and column 6 lines 43-61 for reference to prioritizing media stream requests with requests that carry a specific deadline being giving priority over requests that do not carry a specific deadline). Basing priority of media stream requests on whether the requests

Art Unit: 2616

comprise deadline media data versus other types of media data has the advantage of allowing deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of DeMoney, to combine basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data, as suggested by DeMoney, with the system and method of Babiarz et al., with the motivation being to allow deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

With respect to claim 18, Babiarz et al. does not disclose multicasting the threshold priority to schedulers.

With respect to claims 10 and 18, Bhatia et al., in the field of communications discloses broadcasting a threshold priority (See column 3 lines 46-53 of Bhatia et al. for reference to broadcasting a threshold priority, which is a multicast of the priority to multiple schedulers). Broadcasting a threshold priority has the advantage of allowing the current threshold priority to be known before a data request is made such that data requests not conforming to the threshold priority are not sent.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Bhatia et al., to combine broadcasting a threshold priority, as suggested by Bhatia et al., with the system and method of Babiarz et al. and DeMoney, with the motivation being to allow the

Art Unit: 2616

current threshold priority to be known before a data request is made such that data requests not conforming to the threshold priority are not sent.

With respect to claim 14, Babiarz et al. discloses accumulating bandwidth consumption of the send requests with respective priorities thereof (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to accumulating the current bandwidth of the requests being serviced for each priority).

With respect to claim 15, Babiarz et al. discloses determining a last send request at which the accumulated bandwidth is less than or equal to the send bandwidth (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to determining a last send request before the traffic level bandwidth is exceeded).

With respect to claim 19, Babiarz et al. discloses software implementing a sender (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions).

 Claims 12, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babiarz et al. in view of DeMoney and Bhatia et al. and in further view of Klotsche (U.S. Pat. 7155533 B2).

With respect to claim 12, the combination of Babiarz et al., DeMoney, and Bhatia et al. does not disclose ranking the send requests according to respective priorities.

Application/Control Number: 10/800,287 Art Unit: 2616

With respect to claim 13, the combination of Babiarz et al., DeMoney, and Bhatia et al. does not disclose detecting a send request that corresponds to a send request cutoff using the ranked priority.

With respect to claim 17, Babiarz et al. discloses discarding send requests that do not fit within the send bandwidth (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to discarding send requests with priorities below the certain priority in response to the current available bandwidth). The combination of Babiarz et al., DeMoney, and Bhatia et al. does not disclose partially discarding and partially retaining a send request that is only partially within the send bandwidth.

With respect to claims 12, 13, and 17, Klotsche, in the field of communications, discloses ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth (See column 10 lines 17-27 of Klotsche for reference to ranking requests from highest to lowest priority, servicing all time slot requests in priority order until a last request fitting into available time slots is determined, and partially sending the last request if it does not completely fit in the last available time slot). Ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth has the advantage of allowing the entire bandwidth to be used in the most efficient manner based on priorities.

Art Unit: 2616

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Klotsche, to combine ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth, as suggested by Klotsche, with the system and method of Babiarz et al., DeMoney, and Bhatia et al., with the motivation being to allow the entire bandwidth to be used in the most efficient manner based on priorities.

 Claims 26, 28-32, 35-38, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babiarz et al. in view of DeMoney and in further view Klotsche.

With respect to claim 28, Babiarz et al. discloses a system configured to perform actions (See a system controlling admission of real time packet flows). Babiarz et al. also discloses transmitting a send request associated with a send priority (See page 4 paragraphs 47-48 of Babiarz et al. for reference to call admission requests including priority levels). Babiarz et al. also disclose ascertaining a threshold priority responsive to send request priorities and a send bandwidth, transmitting the threshold priority, and determining if the send request is being honored using the threshold priority and the send priority of the send request (See page 4 paragraph 48 of Babiarz et al. for reference to receiving a certain priority, which is a threshold priority, based on priorities and bandwidth limitations, where calls above the

Art Unit: 2616

certain priority may be admitted and while other calls are not, meaning the priority of a call admission request is compared to the certain priority and a determination of whether the call admission request is selected is made in response to the comparison). Babiarz et al. does not specifically disclose the threshold priority being calculated based on whether media data requested comprises deadline media data versus other types of media data. Babiarz et al. also does not disclose ranking the send requests according to respective priorities.

With respect to claim 35. Babiarz et al. discloses a processor-accessible media comprising processor-executable instructions (See page 5 paragraph 53 of Babiarz et al. for reference to a system and method being implemented by processors operating in accordance with stored instructions). Babiarz et al. also discloses formulating send requests having send priorities (See page 4 paragraphs 47-48 of Babiarz et al. for reference to call admission requests including priority levels). Babiarz et al. further discloses ascertaining respective threshold priorities based on send priorities and send bandwidths. determining if the requests are honored using the threshold priorities (See page 4 paragraph 48 of Babiarz et al. for reference to receiving a certain priority, which is a threshold priority, based on priorities and bandwidth limitations. where calls above the certain priority may be admitted and while other calls are not, meaning the priority of a call admission request is compared to the certain priority and a determination of whether the call admission request is selected is made in response to the comparison). Babiarz et al. does not

Art Unit: 2616

specifically disclose the threshold priority being calculated based on whether media data requested comprises deadline media data versus other types of media data. Babiarz et al. also does not disclose ranking the send requests according to respective priorities for each time slot.

With respect to claims 28 and 35, DeMoney, in the field of communications, discloses basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data (See column 4 lines 5-38 and column 6 lines 43-61 for reference to prioritizing media stream requests with requests that carry a specific deadline being giving priority over requests that do not carry a specific deadline). Basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data has the advantage of allowing deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of DeMoney, to combine basing priority of media stream requests on whether the requests comprise deadline media data versus other types of media data, as suggested by DeMoney, with the system and method of Babiarz et al., with the motivation being to allow deadline sensitive media streams to be given priority such that they are sent before their deadline has passed.

With respect to claim 26, Babiarz et al. does not disclose ranking the send requests according to respective priorities.

Art Unit: 2616

With respect to claim 29, Babiarz et al. discloses detecting a send request cutoff that fits the send bandwidth and is associated with a lowest priority that fits within the send bandwidth (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to the certain priority being a cutoff priority based on a last request conforming to the current bandwidth limitations). Babiarz et al. does not disclose ranking the send requests according to respective priorities.

With respect to claim 38, Babiarz et al. does not disclose obtaining intermediate threshold priorities based on prioritized ranking and bandwidths for each time slot.

With respect to claims 26, 28, 29, 35, and 38, Klotsche, in the field of communications, discloses ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth (See column 10 lines 17-27 of Klotsche for reference to ranking requests from highest to lowest priority, servicing all time slot requests in priority order until a last request fitting into available time slots is determined, and partially sending the last request if it does not completely fit in the last available time slot). Ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth has the advantage of allowing the entire bandwidth to be used in the most efficient manner based on priorities.

Application/Control Number: 10/800,287 Art Unit: 2616

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Klotsche, to combine ranking requests by priority for transmission in time slots, detecting a last send request corresponding to a cutoff using the ranked priority and partially sending the last send request if it is only partially within the send bandwidth, as suggested by Klotsche, with the system and method of Babiarz et al., with the motivation being to allow the entire bandwidth to be used in the most efficient manner based on priorities.

With respect to claim 30, Babiarz et al. discloses the scheduler and sender being on separate devices (See page 4 paragraph 49 and Figure 3 of Babiarz et al. for reference to the clients that act as a sender and scheduler being on separate devices).

With respect to claim 31, Babiarz et al. discloses receiving a send request and transmitting an acknowledgement if the send request is selected (See page 5 paragraph 52 and Figure 6 of Babiarz et al. for reference to sending ACK messages in response to accepted requests).

With respect to claim 32, Babiarz et al. discloses determining that a request is being honored if the send priority is more important than the threshold priority, an acknowledgement is received, and the threshold priority is final (See page 4 paragraph 48, page 5 paragraph 52 and Figures 5 and 6 of Babiarz et al. for reference to accepting a request if its priority is above the certain priority and sending ACK messages in response to accepted requests).

Art Unit: 2616

With respect to claims 36 and 40, Babiarz et al. discloses that request bandwidths comprise a percentage less than 100 percent (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to requests taking up less than the entire bandwidth).

With respect to claim 37, Babiarz et al. discloses transmitting subsequent requests in response to the threshold priorities (See page 4 paragraph 48 and Figure 5 of Babiarz et al. for reference to transmitting further requests in response to the certain priority).

Allowable Subject Matter

7. Claims 5, 8, 16, 24, 33, 34, and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 5, 8, 16, 24, 33, 34, and 39
have been fully considered and are persuasive. The rejection of these claims
has been withdrawn.

Art Unit: 2616

Applicant's arguments with respect to claims 1-4, 6, 7, 9-15, 17-23, 25-32,
 35-38, and 40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

Art Unit: 2616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jem

/Huy D. Vu/ Supervisory Patent Examiner, Art Unit 2616